connection pads at said top surface with each connection pad capturing at least one of said vias;

connection pads at said bottom surface connected by said conductive vias with said connection pads at said top surface;

an electronic component having a first thermal coefficient of expansion (TCE) and having connection pads spaced to align with said connection pads at said top surface;

first solder connections formed from solder balls between said connection pads at said top surface and said component connection pads;

a printed circuit board (PCB) having a second TCE and having connection pads aligned with said connection pads at said bottom surface;

second solder connections formed from solder balls between said connection pads at said bottom surface and said PCB connection pads, wherein at least said first solder connections or ~~and~~ said second solder connections have a reduced cross section at said substrate ~~are shaped~~ to better absorb at least a portion of the stress due to differences between said first TCE and said second TCE with said second solder connections free of underfill.

Claim 3 (currently amended). Ball grid array mounted circuit of claim 1 wherein said electronic component connection pads have a size ~~substantially~~ larger than a size of said connection pads at said top surface and said first solder connections have a ~~substantially~~ smaller cross section at said pads at said top surface than at said component connection pads which acts to absorb at least a portion of the stress due to differences between said first TCE and said second TCE.

Claim 4 (currently amended). Ball grid array mounted circuit of claim 1 wherein said PCB connection pads have a size ~~substantially~~ larger than a size of said connection pads at said bottom surface and said second solder connections have a ~~substantially~~ smaller cross section at said pads at

said bottom surface than at said PCB connection pads which acts to absorb at least a portion of the stress due to differences between said first TCE and said second TCE.

Claim 12 (currently amended). A ball grid array mounted circuit comprising;

a flexible stress relief substrate having a top surface and a bottom surface;

spaced conductive vias extending between the top surface and said bottom surface;

connection pads at said top surface with each connection pad capturing at least one of said vias;

connection pads at said bottom surface connected by said conductive vias with said connection pads at said top surface;

an electronic component having a first thermal coefficient of expansion (TCE) and having connection pads spaced to align with said connection pads at said top surface, said electronic component connection pads being of a larger size than said connection pads at said top surface;

solder connections formed from solder balls between said connection pads at said top surface and said component connection pads, with said larger size pads causing said solder connections to have a ~~substantially greater~~ larger cross section at said component connection pads than at said connection pads at said top surface;

a PCB having a second TCE and having connection pads aligned with said connection pads at said bottom surface, said PCB connection pads being of a larger size than said connection pads at said bottom surface; ~~and~~

solder connections formed from solder balls between said connection pads at said bottom surface and said PCB connection pads with said larger size pads causing said solder

connections to have a ~~substantially greater~~ larger cross section at said PCB connection pads than at said connection pads at said bottom surface; and

wherein connections formed between said component connection pads and said PCB connection pads have an hourglass shape, and act to absorb at least a portion of the stress due to differences between said first TCE and said second TCE.